Session D5
Room: Brookfield, Friday 9.30-12.15

The extensive potential of gene drives based on the newly developed CRISPR-method – a challenge for Prospective Technology Assessment
Chairs: Prof Wolfgang Liebert, Dr Bernd Giese and Jan C. Schmidt

- Dr Bernd Giese (University of Natural Resources and Life Sciences, Vienna, Austria)
- Prof Wolfgang Liebert (University of Natural Resources and Life Sciences, Vienna, Austria)
- René Röspel (Deutscher Bundestag, Germany, member of the Committee on Education, Research and Technology Assessment)
- Claudia Schmidt (European Parliament, member of the STOA-Panel [Science and Technology Options Assessment])
- Renata Briano (European Parliament, member of the STOA-Panel [Science and Technology Options Assessment])
- Dr Tessa Knox (World Health Organization (WHO), Geneva, Technical Officer, Entomology and Vector Control, Global Malaria Programme)

Manipulating the fate of entire populations of sexually reproducing species can be greatly accelerated by so-called gene drives. In particular gene drives based on the CRISPR/Cas9 tool bear the potential to spread traits rapidly in natural populations and even drive populations towards extinction. The aim of the session is (a) to analyze the impact of this novel method of advanced biotechnology in particular with respect to infectious diseases like malaria, agricultural usage, or the eradication of invasive species, (b) to consider the classification as a “late-modern technology”, (c) to introduce the assessment needs related to gene drive technology and present first results of a prospective technology assessment. By this the session will focus on technological aspects as well as on regulatory implications and furthermore discuss also the normative dimension of steering the evolution of live on earth.